

## ABSTRACT

The invention relates to a probe device for measuring the concentration of at least one volatile component in an aqueous solution, in particular for measuring the concentration of ethanol, comprising: a probe body with an opening, which is tightly covered by a flat membrane, wherein said membrane is permeable for the volatile component, a sensor for measuring the concentration of the volatile component, wherein said sensor is located inside the probe body and comprises a sensitive surface, which is located in a first measuring space, wherein an inner side of the flat membrane is part of a second measuring space, wherein the first measuring space and the second measuring space are connected by a measuring aperture, and wherein the first measuring space is connected to a carrier gas exhaust and the second measuring space is connected to a carrier gas supply.